

# ZEISS MyoCare now available in Canada

From June 2023, ZEISS MyoCare as the first age-related myopia management lens solution now is available in Canada. Years of research show that prevalences differ and the risks associated with progressive myopia require specific solutions for different target groups. The new ZEISS MyoCare lenses will become an essential building block in the management of progressive myopia.

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Both myopia and progressive myopia are affecting more and more people worldwide. This has led to a big effort by industry and optometry experts to expand diagnostic and management options. With a projected prevalence of 50 percent of the world's population by 2050\*.

ZEISS is therefore combining more than ten years of extensive experience with progressive and high myopia in Asia with scientifically-based findings to offer effective, specific myopia management solutions in Europe as well.

# ZEISS MyoCare lenses: Efficacy and relaxed, good vision in one lens

Various methods have been developed and tested for managing the progression of myopia, including eyeglasses, contact lenses, and eye drops. ZEISS focuses on comprehensive myopia management, of which innovative spectacle lenses are an important component. ZEISS MyoCare is a new, clinically-proven, effective spectacle lens design that incorporates more than ten years of ZEISS myopia management practice, including special spectacle lenses and scientific insights into the use of contact lenses in orthokeratology.

The latest generation of myopia spectacle lenses uses microstructures to create a simultaneous competing defocus in the peripheral areas. Around the center of the lens with far distance correction, the functional zone incorporates almost invisible concentric circles with alternating defocus and correction zones expanding towards the periphery of the lens. The peripheral defocus which is achieved in this way has been shown to effectively delay the growth of the eye's length beyond that which is physiologically normal, thus slowing down the progression of myopia.

Together with a leading myopia management institute, Wenzhou Medical University Eye Hospital WMU, China, ZEISS tested different design variants. The MyoCare design, as the most promising of the tested designs, is patented as "Cylindrical Annular Refractive Elements" or C.A.R.E.



Technology. To avoid hyperopic defocus for all directions of gaze, ZEISS MyoCare uses a second, innovative technology: ClearFocus optimizes the free-form back of the lens point by point.

ZEISS MyoCare is being tested together with various clinical partners in randomized clinical studies involving more than 1,000 children. The first 12-month interim results of a long-term study with Wenzhou Medical University Eye Hospital demonstrate evidence of efficacy through an absolute reduction in myopia progression in line with study expectations.

"Progressive myopia requires a particularly high sense of responsibility because its professional management sets the course for vision as an essential prerequisite for children's development," says Dr. Ohlendorf. Research and collaboration with universities and other international scientific institutions and eye clinics will therefore continue to be an essential part of ZEISS's efforts in making further developments in myopia management.

To find this optimum balance, we tested more than a dozen prototypes with varying combinations of lens design parameters in a kind of pre-clinical study together with the Wenzhou Medical University Eye Hospital: we first tested the subjective wearability and visual performance with myopic test wearers. The most promising prototypes were then handed out to a small cohort of Chinese children to test the lens prototypes in a real-life wearer trial. The children wore the test lenses for several days in their daily life and again, wearability and visual acuity was assessed to evaluate the subjective visual performance of the lens designs. Based on this evaluation, the prototypes with the optimal combination of vision correction, wearability, and adaptation plus the highest ratings of satisfaction and that were overall most promising with regards to their clinical efficacy were selected for clinical testing in the RCT. These two lens design variants, ZEISS MyoCare and ZEISS MyoCare S representing a harder and a softer version of the ZEISS MyoCare lens design received likewise good evaluations in pre-clinical testing and were therefore subjected to assess their safety and effectiveness in the clinical trials.

ZEISS has launched its first-ever, age-related myopia management lens solution. ZEISS MyoCare lenses are recommended for children younger than 10 years of age and ZEISS MyoCare S lenses are recommended for children age 10 years and older.

ZEISS MyoCare and MyoCare S lenses are the first age-related myopia management lens solution available with ZEISS Premium coatings, and ZEISS UVProtect Technology for full UV protection.\*\* Which is the enhancement of the portfolio and our unwavering commitment to research and development" explains Bryan Rossi, the President of Zeiss Vision Care Canada.

To learn more, click **HERE** 

\*Correction: Regarding myopia prevalence we corrected the reference year into 2050. \*\*Not all products are available in all markets.



## Sources / remarks:

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